DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028890
Date Inspected: 17-Dec-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA observed the following welders working on the OBG at various locations:

This QA Inspector performed Magnetic Particle (MT) testing on the X297-B retrofit stiffener at E line K plate. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed Magnetic Particle (MT) testing on the X2007-01 retrofit stiffener at 13E PP121.5. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed Magnetic Particle (MT) testing on the X2004-01 retrofit stiffener at 13W PP120.6. This QA Inspector performed MT testing utilizing the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26.2.1. This QA Inspector noted that no rejectable indications were

found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

FW Spencer welder Damien Llamos # 6645 was observed performing SMAW welding on 2.0 schedule 40 pipe weld #10/2/42.5/T53 on the exterior of the tower. The welder was observed utilizing WPS FWS-Fillets Murex for SMAW. The welder was observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector appeared to be in compliance with the WPS noted above.

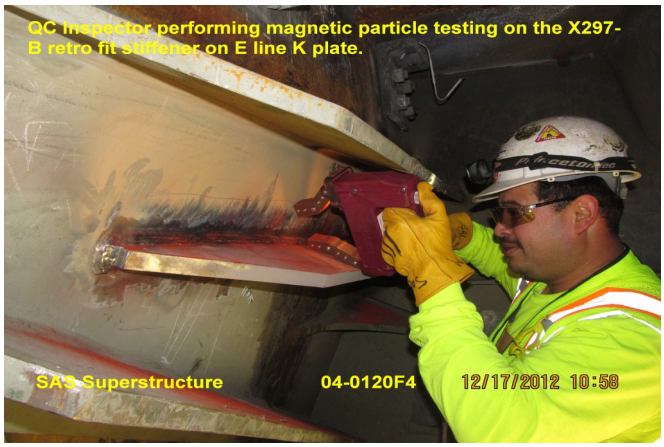
ABF welder Richard Garcia #5892 was observed performing SMAW welding on the curved diaphragm inside the west tower shaft at elevation 150m. The welder was observed utilizing WPS ABF-D1.5-F1200A for SMAW. The welder was observed preheating the welds prior to welding. Other welding parameters as inspected by the QC Inspector appeared to be in compliance with the WPS noted above.

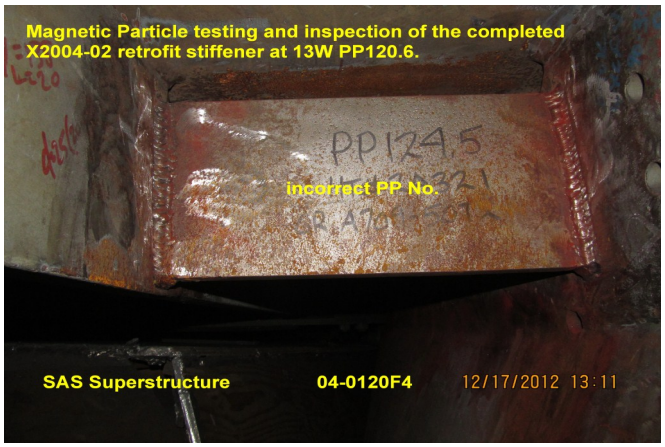
This QA generated a TL-16 for submittal No: ABF-SUB-002784 Rev:0 to verify and perform required NDT testing for retrofit stiffeners at the following locations; X2004-01 at 12W PP111.1, X2004-02 at 13W PP120.6, X2007-01 at 13E PP121.5, X297-01 at W line K plate and X297-02 at E line K plate.

This QA observed QC Inspector William Sherwood and Salvador Merino performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. This QA also observed QC Inspector's John Pagliero and Bernie Docena performing various Non-Destructive Testing (NDT) on completed weld repairs as they became available for testing. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT) and Ultrasonic Testing Shear Wave (UTSW). QC Inspectors were observed performing inspection per applicable code and or contract criteria.
Unless otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

Summary of Conversations:

Conversations with QA Lead Daniel Reyes involved verifying completed work on the retrofit stiffeners at various locations.





Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer